Virginia Division of Consolidated Laboratory Services

Total Residual Chlorine by Low Level Amperometric Titration SM 18 th ED 4500-CI E Page 1 of 1						
Facility Name:			VELAP ID			
Assessor Name:Analyst Name:		Inspection Date				
Relevant Aspect of Standards	Method Reference	Y	N	N/A	Comments	
Records Examined: SOP Number/ Revision/ Date			Analyst:			
imple ID: Date of Sample Preparation:		Date of Analysis:				
The phenylarsine oxide (PAO) or sodium thiosulfate prepared and standardized to 0.000564 N?	4500-CI E 3.c					
KH(IO3)2 at 0.002256 N solution used to standardized the PAO?	4500-CI E 3.a					
Is PAO standardized by adding 5 mL KH(IO3)2 to 200mL water, adding 1.5 g KI, 1 mL acetate buffer, and let stand in the dark for 6 min? Then titrate with PAO to endpoint.	4500-CI E 3.c					
Is 200 mL of sample used or is volume determined to ensure no more than 2 mL of titrant needed?	4500-CI E 4					
Is sample prepared by adding 5 mL KH(IO3)2 to the sample, adding 1.5 g KI, and 1 mL acetate buffer?	4500-CI E 4					
Is sample titrated using known small increments ensuring the meter does not fall to 10% of full scale deflection?	4500-CI E 4					
Is volume determined from last increment of titrant that causes no deflection?	4500-CI E 4					
Were at least 3 titrant additions used or sample discarded?	4500-CI E 4					
Correct equation used for calculation: mg Cl as $\text{Cl}_2/\text{L} = (A \times 200 \times \text{PAO N})$ mL sample X 0.000564 where: A = mL of 0.00564N PAO.	4500-CI E 5					
Notes/ Comments:						